



## PATENT ABSTRACTS OF JAPAN

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(54) **CATALYST FOR PURIFICATION OF EXHAUST  
GAS, ITS PRODUCTION AND METHOD FOR  
PURIFYING EXHAUST GAS**

Is facilitated.

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## (57) Abstract

**PROBLEM TO BE SOLVED:** To suppress the sulfur poisoning of an NOx occlusion and reduction type catalyst for the purification of exhaust gas containing titania in the carrier and to further increase the NOx removal rate of the catalyst after long-term use at a high temperature.

**SOLUTION:** A catalyst supporting layer is composed of a powdery Al<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> carrier obtained by coating the surfaces of alumina particles with independent fine titania particles having  $\leq 10$  nm particle diameter. Titania has a smaller number of base spots than alumina and is less liable to adsorb SOx. The contact of an NOx storage material with the alumina is suppressed and the interface between the titania and the NOx storage material increases. Since an easily decomposable multiple oxide precursor is formed, the desorption of adsorbed SOx

